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TIPE	Docket No.:	WIS4987P0321US		
FEB 0 8	ROIS		S PATEI	NT & TRADEMARK OFFICE
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Applicant:	Eric W. Triplett et al.	)	
TRADE	Serial No.:	10/720,459	)	Group Art Unit: 1616
	Filed:	November 24, 2003	)	Examiner: S. Clardy
	For:	Bacterial Inoculants for Enhancing Plant Growth	)	

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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Commissioner for Patents P. O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

Attached Form PTO/SB/08A lists an abstract. This abstract was from a seminar given in Sydney, Australia on December 5, 2000. The abstract book for the meeting was available on December 3, 2000. Copies of the abstract are enclosed. Entry into the record is respectfully requested.

Respectfully submitted,

Lisa V. Mueller, Reg. No. 38,978

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## **CERTIFICATE OF MAILING**

I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage at First Class Mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on February 6, 2006.

Laura Czech

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Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Papervock Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. **Application Number** 10/720,459 Substitute for form 1449A/PTO Filing Date 11/24/2003 INFORMATIO DISCL First Named Inventor Eric W. Triplett et al. STATEMENT BY Group Art Unit 1616 (Use as many sheets as necessary) **Examiner Name** S. Cardy Sheet of Attorney Docket No. WIS4987P0321US

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
		Riggs, P. J., et al., "Enhanced Maize and Wheat Productivity By Inoculation with Diazotrophic Endophytes", 8th International Symposium on Nitrogen Fixation with Non-Legumes, Sydney, AU (12-3-00 - 12-5-00).				
		-				
Examiner Signature		Date Considered				

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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## ENHANCED MAIZE AND WHEAT PRODUCTIVITY BY INOCULATION WITH DIAZOTROPHIC ENDOPHYTES

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The objective of this work over the last three years was to identify grass-endophyte associations with increased plant productivity compared to uninoculated controls. We have used a collection of endophytes isolated by ourselves and by other groups. The experiments were done under field and greenhouse conditions in the presence or absence of added fixed nitrogen. Significant yield enhancements of N-fertilized maize were obtained with bacterial endophytes that we have isolated from nitrogen efficient lines of maize (such as Klebsiella pneumoniae strains kmvsy and 342) and from unfertilized field-grown switchgrass (such as Pantoea agglomerans P101 and P102). Several other strains from other groups were also tested with our best yield... enhancements from two Brazilian strains, Gluconacetobacter diazotrophicus PAI5 and Herbaspirillum seropedicae Z152. Field experiments in Wisconsin were conducted in 1998, 1999, and 2000 and in an additional four states in 2000 with a minimum of three elite lines of maize used each year. No strains were capable of relieving the nitrogen deficiency symptoms of unfertilized maize in either the field or the greenhouse. However, striking results were recently obtained with two elite lines of spring wheat in the greenhouse where nitrogen deficiency symptoms were dramatically relieved by inoculation with a Klebsiella endophytic strain. These plants were cultured in sandvermicullite in the absence of added N. Other strains relieved nitrogen stress conditions but to a lesser degree. Experiments to determine whether this relief of N-stress conditions is caused by nitrogen fixation by this Klebsiella endophyte are now in progress. Data on the genomics of this endophyte will also be presented.